In the Claims

The following listing replaces all previous listings of the Claims

What is claimed is

1 (previously presented). A method of providing a human-computer interface, using an input device having a range of motion in three dimensions, denoted the x-device dimension, the y-device dimension, and the z-device dimension, comprising:

a) Providing a display space, having mutually orthogonal x-display and y-display dimensions, where the x-display dimension and the y-display dimension together define a plane orthogonal to a user direction of view into the display space, and a z-display dimension orthogonal to both the x-display dimension and the y-display dimension;

b) Establishing a correspondence between motion of the input device and motion of a cursor relative to the display space;

c) Providing a three-dimensional application domain, having corresponding interface characteristics;

d) Providing a personal domain, having corresponding interface characteristics;

e) If the user is interacting according to the application domain characteristics, then determining if user motion of the input device corresponds to cursor motion into an application-to-personal defined range of coordinates in the z-display dimension, and, if so, then providing interaction according to the personal domain characteristics;

f) If the user is interacting according to the personal domain characteristics, then determining if user motion of the input device corresponds to motion of the cursor into a personal-to-application defined range of coordinates in the z-display dimension, and, if so, then providing interaction according to the application domain characteristics.

2 (previously presented). A method of providing a human-computer interface, using an input device having a range of motion in three dimensions, denoted the x-device dimension, the y-device dimension, and the z-device dimension, comprising:

a) Providing a display space, having mutually orthogonal x-display and y-display dimensions, where the x-display dimension and the y-display dimension define a plane orthogonal to a user direction of view into the display space, and a z-display dimension orthogonal to both the x-display dimension and the y-display dimension;

b) Providing a three-dimensional application domain, having corresponding interface characteristics;

c) Providing a personal domain, having corresponding interface characteristics;

d) If the user is interacting according to the application domain characteristics, then determining if the input device has moved into an application-to-personal defined range of coordinates in the z-device dimension, and, if so, then providing interaction according to the personal domain characteristics;

e) If the user is interacting according to the personal domain characteristics, then determining if the input device has moved into a personal-to-application defined range of coordinates in the z-device dimension, and, if so, then providing interaction according to the application domain characteristics.

3 (previously presented). A method as in Claim 2, wherein determining if the input device has moved into an application-to-personal defined range of coordinates in the z-device dimension comprises determining if the input device has crossed an application-to-personal surface in the space defined by the x-device dimension, the y-device dimension, and the z-device dimension.

4 (previously presented). A method as in Claim 3, wherein the application-to-personal surface comprises a surface separating the space defined by the x-device dimension, the y-device dimension, and the z-device dimension into an application portion and a personal transition portion, wherein the volume of the application portion is at least three times larger than the volume of the personal transition portion.

5 (currently amended). A method as in Claim 4, wherein the application-to-personal surface comprises a plane orthogonal to the z-device dimension at a coordinate in the z-device dimension such that more than two-thirds of the coordinate space in the z-device dimension is in the application portion.

6 (previously presented). A method as in Claim 2, wherein determining if the input device has moved into a personal-to-application defined range of coordinates in the z-device dimension comprises determining if the device has crossed an personal-to-application surface in the space defined by the x-device dimension, the y-device dimension, and the z-device dimension.

7 (previously presented). A method as in Claim 6, wherein the personal-to-application surface comprises a surface separating the space defined by the x-device dimension, the y-device dimension, and the z-device dimension into a personal portion and an application transition portion, wherein the volume of the personal portion is at least three times larger than the volume of the application transition portion.

8 (previously presented). A method as in Claim 6, wherein the personal-to-application surface comprises a plane orthogonal to the z-device dimension at a coordinate in the z-device

dimension such that more than two-thirds of the coordinate space in the z-device dimension is in the personal portion.

9 (original). A method as in Claim 2,

a) wherein providing for interaction according to the application domain comprises providing a display of the application domain having active application characteristics and providing a display of the personal domain having inactive personal characteristics;

b) wherein providing for interaction according to the personal domain comprises providing a display of the personal domain having active personal characteristics, comprising enhanced perceptual characteristics relative to inactive personal characteristics, and providing a display of the application domain having inactive application characteristics, comprising reduced perceptual characteristics relative to active application characteristics.

10 (original). A method as in Claim 9, wherein active personal characteristics comprise objects displayed at an active size, and wherein inactive personal characteristics comprise an inactive size less than the active size.

11 (original). A method as in Claim 9, wherein active personal characteristics comprise objects displayed at an active visual intensity, and inactive personal characteristics comprise objects displayed at an inactive visual intensity less than the active visual intensity.

12 (original). A method as in Claim 9, wherein inactive personal characteristics comprise objects displayed semitransparently.

13 (original). A method as in Claim 2, wherein providing interaction according to the application domain comprises providing a display of the application domain using an application portion of the displayable space, and providing a display of the personal domain using a personal portion of the displayable space, wherein the application portion is at least 3 times the size of the personal portion.

14 (original). A method as in Claim 2, wherein providing interaction according to the personal domain comprises providing a display of the application domain using an application portion of the displayable space, and providing a display of the personal domain using a personal portion of the displayable space, wherein the personal portion is at least 3 times the size of the application portion.

15 (original). A method as in Claim 2, wherein

a) providing interaction according to the application domain comprises providing a display of the application domain using an active application portion of the displayable space, and providing a display of the personal domain using an inactive personal portion of the displayable space,

b) providing interaction according to the personal domain comprises providing a display of the application domain using an inactive application portion of the displayable space, and providing a display of the personal domain using an active personal portion of the displayable space;

c) wherein the active personal portion is at least one third larger than the inactive personal portion.